



## RELEASE DOCUMENTATION

92W0106-013 HO

document

### SOFTWARE RELEASE DESCRIPTION (SRD)

system V7.7  
product level 8R0  
issue number 1  
software category 1  
date 7/20/81

#### Product:

MAINTAIN III TEST SYSTEM

distribution

lists:

PREFACE

This Software Release Description describes the functions of a product that is released for use on all MCO computers and computer systems.

This description is re-issued with each new release of the product which it describes.

Section 2 presents an overview of the product. New functions and enhancements are described in Section 3. The complete list of supported programs is given in Section 4. A list of type & Feature numbers supported cross referenced to program numbers is given in Section 5. Guidelines and restrictions upon the use of the product compose Section 6. Known problems with this version are listed in Section 7. DSURs resolved with this release are listed in Section 8, while Section 9 lists any changes to the documents related with this product.

The use of parenthesis [()] in sections 1.4, 1.5.1, 4, and 5 stand for an alphabetic character representing the media on which the material is supplied.

C = Disc Pack Object

G = 9 Track Magnetic Tape Object, 800 BPI / 1600 BPI

J = Punched Card Object

R = 7 Track Magnetic Tape Object, 556 BPI

U = Paper Tape Object

<u>TABLE OF CONTENTS</u>		<u>PAGE</u>
1.	GENERAL INFORMATION	4
1.1	Release Identification	4
1.2	Release Description	4
1.3	Error Reporting Procedure	4
1.4	Related Documents	5
1.5	Installation	6
1.5.1	Contents of the Release Media	6
2.	PRODUCT OVERVIEW	8
3.	NEW FUNCTIONS AND ENHANCEMENTS	9
4.	SUPPORTED SOFTWARE	10
5.	SUPPORTED HARDWARE	12
6.	GUIDELINES AND RESTRICTIONS	17
6.1	Guidelines	17
6.2	Restrictions	18
7.	KNOWN PROBLEMS	19
8.	DSURS CLOSED	21
9.	DOCUMENTATION CHANGES	22

1. GENERAL INFORMATION

1.1 Release Identification

Release Number:

MAINTAIN III Test System 8R0.0

Release Media:

The released software may be ordered for delivery on:

6315-00/03/05 - magnetic tape  
6315-02 - punched paper tape  
6315-01 - punched cards  
6315-06/08 - disc pack  
6315-09 - floppy diskette

1.2 Release Description

Maintain III Test System 8R0.0 is a stability release. This release replaces all previous releases of the MAINTAIN III Test System. This SRD also serves as a supplement to the MAINTAIN III Test System Manuals and it is suggested that it be placed with those manuals for future use.

1.3 Error Reporting Procedure

Users discovering errors or deficiencies in the performance of the software being released should communicate this information to the local Sperry Univac branch office, using a DIAGNOSTIC SOFTWARE USERS REPORT (DSUR), Form UD1-1943, to describe the problem encountered. DSURs should include the release number, along with a clear description of the problem, and may be accompanied by a console printout, and/or memory dump.

The local Sperry Univac personnel will verify that the errors in question are adequately documented and forward the DSUR to:

Diagnostic Software Development  
Sperry Univac  
P. O. Box C-19504, M.S. 0582  
Irvine, CA 92713  
Attn: DSUR Coordinator

The status of these DSUR's will be found in the TRACE database.

## 1.4 Related Documents

The following documents describe their related products or contain material relevant to it.

UP-8672	92 ( ) 0105-002
UP-8672	92 ( ) 0105-003
W 8900239	92 ( ) 0105-012
UP-8876	92 ( ) 0105-013
UP-8876	92 ( ) 0105-014
W 8900258	92 ( ) 0106-010
UP-8672	92 ( ) 0106-013
UP-8876	92 ( ) 0106-014
W 8900247	92 ( ) 0106-015
UP-8876	92 ( ) 0106-017
W 8900278	92 ( ) 0106-019
UP-8877	92 ( ) 0106-021
UP-8876	92 ( ) 0106-026
UP-8877	92 ( ) 0106-027
W 8900474	92 ( ) 0106-028
W 8901504	92 ( ) 0106-029
UP-8876	92 ( ) 0106-030
UP-8672	92 ( ) 0107-002
UP-8672	92 ( ) 0107-003
UP-8672	92 ( ) 0107-005
UP-8672	92 ( ) 0107-008
UP-8672	92 ( ) 0107-009
UP-8672	92 ( ) 0107-010
UP-8877	92 ( ) 0107-011
UP-8877	92 ( ) 0107-012
W 8900194	92 ( ) 0107-015
UP-8672	92 ( ) 0107-020
UP-8672	92 ( ) 0107-021
UP-8877	92 ( ) 0107-022
UP-8877	92 ( ) 0107-023
UP-8876	92 ( ) 0107-031
W 8900202	92 ( ) 0107-032
UP-8672	92 ( ) 0107-035
W 8900207	92 ( ) 0107-038
W 8900275	92 ( ) 0107-039

UP-8672	92 ( ) 0109-004
W 8900313	92 ( ) 0109-005
UP-8672	92 ( ) 0109-006
UP-8877	92 ( ) 0109-008
UP-8876	92 ( ) 0109-011
UP-8672	92 ( ) 0109-012
UP-8876	92 ( ) 0109-013
UP-8876	92 ( ) 0109-014
UP-8672	92 ( ) 0111-002
UP-8877	92 ( ) 0111-010
UP-8877	92 ( ) 0114-002
UP-8672	92 ( ) 0115-001
UP-8672	92 ( ) 0115-002
UP-8876	92 ( ) 0115-003
UP-8672	92 ( ) 0115-004
UP-8672	92 ( ) 0115-005
UP-8672	92 ( ) 0115-006

## 1.5 Installation

### 1.5.1 Contents of the Release Media

PROGRAM NAME	PART NUMBER	FILE
MAINTAIN III EXECUTIVE	92 ( ) 0106-013H	000
DIRECTORY		001
INSTRUCTION TEST, PART 1	92 ( ) 0107-002P	P 002
INSTRUCTION TEST, PART 2	92 ( ) 0107-003J	003
INSTRUCTION TEST, PART 3	92 ( ) 0105-003B	004
MEMORY TEST, PART 1	92 ( ) 0107-020K	005
MEMORY TEST, PART 2	92 ( ) 0107-021L	006
TELETYPE TEST	92 ( ) 0107-005E	007
POWER FAIL RESTART TEST	92 ( ) 0107-008G	P 010
PIM TEST	92 ( ) 0107-009K	011
REAL TIME CLOCK TEST	92 ( ) 0107-035F	012
MEMORY PROTECT TEST	92 ( ) 0105-002G	013
BUFFERED I/O TEST	92 ( ) 0107-010D	014
600 WCS TEST	92 ( ) 0109-004B	015
CARD READER TEST	92 ( ) 0107-012F	016
CARD PUNCH TEST	92 ( ) 0107-022A	017
PAPER TAPE AND BIC TEST	92 ( ) 0107-023G	020

UNIV. ASYN. SERIAL CONT. TEST	92 ( ) 0107-031B	021
RELAY CONTACT I/O TEST	92 ( ) 0107-032A	022
DCM TEST	92 ( ) 0106-014E	023
MOVING HEAD DISK TEST, 2822	92 ( ) 0105-012A	024
MAGNETIC TAPE TEST	92 ( ) 0106-015D	025
600 DCM MAPPED TEST	92 ( ) 0105-013C	026
LINE PRINTER TEST	92 ( ) 0107-011U*OP	027
DAMC TEST, 5401	92 ( ) 0107-039B	030
DAMC TEST, 5402	92 ( ) 0106-010D*0	031
DRUM/FIXED HEAD DISK TEST	92 ( ) 0107-015B	032
MOVING HEAD DISK TEST, 70-76*1	92 ( ) 0107-038D	033
BSC LAD TEST	92 ( ) 0106-017H	034
600 FLOATING POINT UNIT TEST	92 ( ) 0109-005C	035
MOVING HEAD DISK TEST, 70-751*	92 ( ) 0106-019C	036
600 MEMORY MAP TEST	92 ( ) 0109-006K*OP	037
PMA/BTC TEST	92 ( ) 0105-014A	040
MOVING HEAD DISK TEST, F3094/96	92 ( ) 0106-021G*OP	041
MOVING HEAD DISK TEST, 2823/24	92 ( ) 0109-008C	042
600 CACHE MEMORY TEST	92 ( ) 0111-002C P	043
DIR. MEM. DISK CONT.	92 ( ) 0111-010K P	044
DCM MAPPED TEST, F3074	92 ( ) 0109-011B	045
F3074 WCS TEST	92 ( ) 0109-012A	046
INFO DISPLAY SUBSYS TEST	92 ( ) 0106-026B	047
IEEE 488-1975 CONTROLLER TEST	92 ( ) 0106-028B	050
ANALOGIC TEST	92 ( ) 0109-014B	051
BOP LAD TEST	92 ( ) 0109-013C	052
BUFFERED EDITING TERMINAL	92 ( ) 0106-030D*0	053
MAGNETIC TAPE TEST, F3089/93, 0870	92 ( ) 0106-027D*0	054
DCM MAPPED TEST, F3078	92 ( ) 0115-003A	055
CACHE TEST, F3078	92 ( ) 0115-004C	056
MAP TEST, F3078	92 ( ) 0115-002D*0	057
MICRO DIAGNOSTIC	92 ( ) 0115-001C	060
WCS TEST, F3078	92 ( ) 0115-005A	061
FPP TEST, F3078	92 ( ) 0115-006A	062
F3068-00 CHANNEL TEST	92 ( ) 0114-002D*OP	063
DISKETTE STORAGE SYSTEM TEST	92 ( ) 0106-029C*0	064

NEW OR CHANGED PROGRAMS \*  
SEE SECTION 7 - - P

2. PRODUCT OVERVIEW

To provide Engineering, Manufacturing, and Customer Service with diagnostics for isolating and repairing malfunctions in MCO computers (620/ V70/ V77/ etc.), computer options (memory/ extended instructions/ map/ clock/ etc.), or peripherals (disc/ mag tape/ paper tape/ line printer/ card reader/etc.).

3. NEW FUNCTIONS AND ENHANCEMENTS

Revision 8R0.0 contains the following enhancements over Revision 7R8.

- A. New listings for all component tests on fiche.
- B. Directory
  - 1. Executing the directory program will clear all PIM masks
- C. Line Printer Test
  - 1. Corrected problem with non-sul printers
- D. DAMC Test, 5402
  - 1. Corrected part number printout
- E. 600 Memory Map Test
  - 1. Added memory error state printout
- F. Moving Head Disc Test, F3094/96
  - 1. Corrected problem in BIC interrupt routine
- G. Buffered Editing Terminal Test
  - 1. Corrected test 011 (Programmed Attention Test)
- H. Magnetic Tape Test, F3089/93, 0870
  - 1. Corrected timeout problems in F and T Tests
- I. Map Test, F3078
  - 1. Added memory error state printout
- J. F3068-00 Channel Test
  - 1. Corrected error
  - 2. Added purge cache
- K. Diskette Storage System Test
  - 1. Enhanced for single sided IBM format

4. SUPPORTED SOFTWARE

The following is a list of the software parts that comprise the MAINTAIN III Test System and their current revision level.

PART NUMBER	SOURCE	OBJECT			LIST	
		RMD	MT	CARD	PT	
92()0105-002	G			G	G	
92()0105-003	B			B	B	
92()0105-012	A			A	A	
92()0105-013	C			C	C	
92()0105-014	A			A	A	
92()0106-010	D			D	D	
92()0106-013	H	HO	HO	HO	H	
92()0106-014	E			E	E	
92()0106-015	D			D	D	
92()0106-017	H			H	H	
92()0106-019	C			C	C	
92()0106-021	G			G	G	
92()0106-026	B			B	B	
92()0106-027	D			D	D	
92()0106-028	B			B	B	
92()0106-029	C			C	C	
92()0106-030	D			D	D	
92()0107-002	P			P	P	
92()0107-003	J			J	J	
92()0107-005	E			E	E	
92()0107-008	G			G	G	
92()0107-009	K			K	K	
92()0107-010	D			D	D	
92()0107-011	U			U	U	
92()0107-012	F			F	F	
92()0107-015	B			B	B	
92()0107-020	K			K	K	
92()0107-021	L			L	L	
92()0107-022	A			A	A	
92()0107-023	G			G	G	
92()0107-031	B			B	B	
92()0107-032	A			A	A	
92()0107-035	F			F	F	
92()0107-038	D			D	D	
92()0107-039	B			B	B	

SPERRY UNIVAC - SRD - MAINTAIN III 8RO : 11

92()0109-004	B	B	B
92()0109-005	C	C	C
92()0109-006	K	K	K
92()0109-008	C	C	C
92()0109-011	B	B	B
92()0109-012	A	A	A
92()0109-013	C	C	C
92()0109-014	B	B	B
92()0111-002	C	C	C
92()0111-010	K	K	K
92()0114-002	D	D	D
92()0115-001	C	C	C
92()0115-002	D	D	D
92()0115-003	A	A	A
92()0115-004	C	C	C
92()0115-005	A	A	A
92()0115-006	A	A	A

5. SUPPORTED HARDWARE

The following is a list of the peripheral type and feature numbers and their applicable program numbers that comprise the MAINTAIN III Test System.

TYPE/FEATURE	PROGRAM NUMBER
0786-**	92( ) 0107-011
0777-**	92( ) 0114-002
0780-**	92( ) 0107-011
0786-**	92( ) 0107-011
0789-**	92( ) 0107-011
0870-**	92( ) 0106-027
0876-**	92( ) 0106-027
2808-**	92( ) 0115-001
2808-**	92( ) 0115-002
2808-**	92( ) 0115-003
2808-**	92( ) 0115-004
2808-**	92( ) 0115-005
2808-**	92( ) 0115-006
2810-**	92( ) 0107-005
2811-**	92( ) 0107-005
2812-**	92( ) 0107-012
2813-00	92( ) 0107-022
2817-**	92( ) 0107-005
2817-03	92( ) 0107-031
2817-04	92( ) 0107-031
2817-05	92( ) 0107-031
2817-06	92( ) 0106-014
2817-07	92( ) 0106-014
2817-08	92( ) 0106-014
2818-**	92( ) 0107-005
2819-**	92( ) 0107-011
2820-**	92( ) 0107-011
2822-**	92( ) 0105-012
2823-**	92( ) 0109-008
2824-**	92( ) 0109-008
2825-**	92( ) 0111-010
2826-**	92( ) 0111-010
2838-**	92( ) 0107-005
2839-**	92( ) 0107-005
2840-00	92( ) 0106-030

2840-01	92( ) 0106-030
2840-02	92( ) 0106-030
2840-03	92( ) 0106-030
2840-04	92( ) 0106-030
2840-05	92( ) 0106-030
2842-**	92( ) 0111-010
2843-**	92( ) 0111-010
2844-00	92( ) 0107-011
2844-02	92( ) 0107-012
2844-10	92( ) 0107-022
2845-**	92( ) 0106-026
2846-**	92( ) 0106-026
2847-**	92( ) 0107-011
620-25	92( ) 0107-012
70-6300	92( ) 0107-023
70-6310	92( ) 0107-023
70-6311	92( ) 0107-023
70-6320	92( ) 0107-023
70-6372	92( ) 0107-023
70-8030	92( ) 0109-014
73-0020	92( ) 0106-015
8433-**	92( ) 0111-010
F2834*	92( ) 0109-017
F2960-04	92( ) 0109-005
F2960-05	92( ) 0109-004
F2960-06	92( ) 0109-004
F2960-08	92( ) 0109-006
F2960-09	92( ) 0111-002
F2960-32	92( ) 0109-004
F2960-47	92( ) 0105-013
F2960-47	92( ) 0109-006
F3000-**	92( ) 0105-013
F3000-**	92( ) 0106-014
F3000-**	92( ) 0109-011
F3000-**	92( ) 0115-003
F3001-00	92( ) 0105-013
F3001-00	92( ) 0106-014
F3001-00	92( ) 0109-011
F3001-00	92( ) 0115-003
F3001-01	92( ) 0105-013

F3001-01	92( ) 0106-014
F3001-01	92( ) 0109-011
F3001-01	92( ) 0115-003
F3001-02	92( ) 0105-013
F3001-02	92( ) 0106-014
F3001-02	92( ) 0109-011
F3001-02	92( ) 0115-003
F3001-03	92( ) 0105-013
F3001-03	92( ) 0106-014
F3001-03	92( ) 0109-011
F3001-03	92( ) 0115-003
F3001-04	92( ) 0105-013
F3001-04	92( ) 0106-014
F3001-04	92( ) 0109-011
F3001-04	92( ) 0115-003
F3001-05	92( ) 0106-017
F3001-06	92( ) 0106-014
F3001-07	92( ) 0106-014
F3002-00	92( ) 0107-039
F3002-01	92( ) 0106-010
F3003-02	92( ) 0106-017
F3003-03	92( ) 0106-017
F3003-04	92( ) 0106-017
F3003-05	92( ) 0106-017
F3004-**	92( ) 0107-031
F3012-00	92( ) 0111-010
F3012-01	92( ) 0111-010
F3012-02	92( ) 0111-010
F3012-03	92( ) 0111-010
F3024-00	92( ) 0105-014
F3024-01	92( ) 0107-009
F3026-01	92( ) 0109-006
F3026-01	92( ) 0109-011
F3027-00	92( ) 0109-005
F3028-00	92( ) 0111-002
F3034-00	92( ) 0109-004
F3034-01	92( ) 0109-004
F3034-02	92( ) 0109-004
F3034-03	92( ) 0109-012
F3049-00	92( ) 0107-010

F3057-00	92( ) 0109-004
F3059-00	92( ) 0107-011
F3060-00	92( ) 0109-013
F3061-00	92( ) 0106-028
F3064-**	92( ) 0106-029
F3066-00	92( ) 0106-021
F3067-**	92( ) 0111-010
F3068-00	92( ) 0114-002
F3074-00	92( ) 0109-011
F3078-**	92( ) 0115-001
F3078-**	92( ) 0115-002
F3078-**	92( ) 0115-004
F3078-**	92( ) 0115-005
F3078-**	92( ) 0115-006
F3080-00	92( ) 0107-012
F3082-**	92( ) 0107-023
F3083-**	92( ) 0107-023
F3084-**	92( ) 0107-023
F3085-00	92( ) 0107-011
F3086-00	92( ) 0107-011
F3087-00	92( ) 0107-011
F3088-**	92( ) 0106-015
F3089-00	92( ) 0106-015
F3089-01	92( ) 0106-015
F3089-02	92( ) 0106-015
F3089-03	92( ) 0106-015
F3089-04	92( ) 0106-027
F3089-05	92( ) 0106-027
F3089-06	92( ) 0106-027
F3090-00	92( ) 0105-012
F3091-00	92( ) 0109-008
F3092-00	92( ) 0109-008
F3093-00	92( ) 0106-027
F3093-01	92( ) 0106-027
F3093-02	92( ) 0106-027
F3093-03	92( ) 0106-027
F3093-04	92( ) 0106-027
F3093-05	92( ) 0106-027
F3093-06	92( ) 0106-027
F3094-**	92( ) 0106-021

SPERRY UNIVAC - SRD - MAINTAIN III 8R0 : 16

F3095-**	92( ) 0107-038
F3096-**	92( ) 0106-021
F3098-**	92( ) 0107-015
F3278-**	92( ) 0107-032
F3310-**	92( ) 0106-021
F3320-**	92( ) 0106-027

## 6. GUIDELINES AND RESTRICTIONS

### 6.1 Guidelines

MAINTAIN III Test System 8R0 contains no operating differences from 7R8.

To boot from cartridge disk (unit 0) or floppy diskette (unit 0) use the CPUs ABL by placing a 2 in register 0 prior to initiating the ABL. For systems without ABL, key in the following bootstrap:

001130	1004XX	START	EXC	04XX
001131	1040XX		EXC2	XX
001132	1002XX		EXC	02XX
001133	005001		TZA	
001134	1031XX		OAR	XX
001135	1010XX	LOOP1	SEN	XX, SDONE
001136	001141			
001137	001000		JMP	LOOP1
001140	001135			
001141	1025XX	SDONE	CIA	XX
001142	151167		ANA	MASK
001143	001016		JANZ	START
001144	001130			
001145	1000ZZ		EXC	ZZ
001146	1003XX		EXC	03XX
001147	005102		INCR	2
001150	1032XX		OBR	XX
001151	1031YY		OAR	YY
001152	006010		LDAI	01130
001153	001130			
001154	1031ZZ		OAR	ZZ
001155	1000YY		EXC	YY
001156	1000XX		EXC	XX
001157	1014XX	LOOP2	SEN	04XX, LOOP2
001160	001157			
001161	1025XX		CIA	XX
001162	151167		ANA	MASK
001163	001016		JANZ	START
001164	001130			
001165	001000		JMP	0600
001166	000600			
001167	007760	MASK	DATA	07760

WHERE:  
XX=DISKETTE DEVICE ADDRESS  
YY=BIC EVEN DEVICE ADDRESS  
ZZ=BIC ODD DEVICE ADDRESS

START PROGRAM AT 01130

## 6.2 Restrictions

A change is required to the card bootstrap when used on a V77-200.

LOCATION	NEW CONTENTS
000173	1021ZZ
000174	055000
000175	005144
000176	001000
000177	000213
000221	001000
000222	000173

Do not input into locations 000223-000225.

Unless specifically designated as a mapped test, no test within the Test System utilizes the MAP key or BIC key. To run any nonmapped test in a mapped environment, the system must be mapped by using the utility functions of the MAP test.

A prerequisite to running the MAGNETIC TAPE TEST F3089/93, 0870 is Hardware IEN 94001.

A prerequisite to running the MAP TEST, F3078 is Hardware FCO W2834-14.

Refer to Section 7 (KNOWN PROBLEMS) for further restrictions.

7. KNOWN PROBLEMS

The following are reported problems. MCO Diagnostic Software Development has not verified the existence of these problems.

SMR 1693, 12/16/77, MEMORY - MEGAMAP DIAG.

Memory-Megamap I/O error key bits (status register bits 12-15) not tested under diagnostic for other than zero condition.

DSUR 05721, 2/5/80, MAP TEST

It is not possible to use the CMM,x,x command after running only test 1. It seems to be necessary to run test 2 first.

SUR, 10/19/79, LINE PRINTER TEST

The document contains no examples of the Vertical Format test.

DSUR 36753, 12/18/79, POWER FAIL/RESTART TEST

It is possible to get extra, random characters preceding the normal output messages. This occurs because the console power is removed.

DSUR 18645, 2/22/80, Documents

Some documents still contain the old varian model numbers.

DSUR 39335, 2/22/80, DMDC

The test will experience rate errors when used with the 128K ECC memories.

DSUR 19357, 12/16/80, V77-400

The load instruction allows indirect addressing to occur when bit 15 is set in the register specified by the (RX) field of the instruction. This fact is not documented in the Architecture Reference Manual nor is it tested in MAINTAIN III.

DSUR 49548, 1/5/81, Cache 600

When running the Cache Memory Test subtests 1-4 will fail with an ER04 error reported to the user. This error is reported only when subtest 1-4 are run first. If subtest 7 is run prior to running subtest 1-4 the error does not occur.

DSUR 31834, 3/11/81, SU39LAZR

There is not any provision for altering the print buffer (PRTEBUF) used by test #4.

DSUR 48643, 3/24/81, EXECUTIVE

Enhance EXECUTIVE to provide a hardcopy of all input/output messages.

DSUR 50129, 4/9/81, MHDT-F

Diagnostic is forcing an end-of-track condition but is not testing to insure that the "EOT" bit is set.

SPERRY UNIVAC - SRD - MAINTAIN III 8R0 : 20

A PATCH IS AVAILABLE

LOCATION	OLD CONTENTS	NEW CONTENTS
003314	001000	001010
003315	003326	003320
003316	001010	001000
003317	003322	003326

8. DSURS CLOSED

The problems relating to these DSURs may be found in the Trace Data-base.

DSUR#	COMPONENT
8R0	
05714	MANUAL
05717	MANUAL
06716	PRINTER
19364	DCM
19366	DCMMAP
19368	DCM
34381	MHDT-F
42547	MAP8
49534	MAGT89
49555	BUFEDT
51659	PRINTER

9. DOCUMENTATION CHANGES

The following describes additions to be made to the MAINTAIN III Test Programs Users Manual UP-8672.

Delete Tables 2-9 and 2-10 as they are no longer applicable.

Section 3 after the description of subtest 22 add the following warning:

On V77-200's there is no indirect address limiting and the message indicating such will appear. On V77-200's this is not an error printout.

Section 11.5.2 add the following after the BIC Dev Addr = Response:

INPUT TYPE 2 PAGES

The operator must respond with the character A for all are type 2, or an N for none are Type 2 pages.

Section 17.2.3.3 add to list

TEST	FUNCTION TESTED
22	Store byte executive mode 1 key 1
23	Store byte executive mode 1 key 1
24	Store byte executive mode 2 key 1
25	Store byte executive mode 2 key 1
26	Store byte block executive mode 1 key 1
27	Store byte block executive mode 1 key 1

Section 17.4.4 add to list

ERROR	CODE	MEANING
	22	Executive mode state 1 store byte failed
	23	Executive mode state 1 store byte failed
	24	Executive mode state 2 store byte failed
	25	Executive mode state 2 store byte failed
	26	Executive mode state 1 store byte block failed
	27	Executive mode state 1 store byte block failed

If error codes 23, 25, and 27 all occur, then the FCO is probably not installed.

In UP-8876 part 3, add the following general comment at the end of the hardware requirements 1.2 & 2.2:

The LAD under test must have a test connector wired as shown in the DCM operation and service manual attached to the LAD output connector.

Until an update to UP-8877 is available, add the 0789 printer type to section 4.2 heading line.

Add the following text to the 'Printer Type' description in section 4.2.3.1:

A 10 FOR A 0789 PRINTER

Add the following text following the 'Printer Type' description in section 4.2.3.1:

For the Type 10 Printers, the program prompts

BAND DASH NUMBER

The operator responds with the two digit decimal number corresponding to the dash number of the band feature followed by a period.

Add the following printer type to table 4.2:

PRINTER TYPE 10  
T0789 PRINTER

Add the following at the end of section 4.2.3.2:

When using Figure 4-1 for the 0789 Printer, the output will vary according to the band used.

Add the following to Table 4-4:

The following error messages are applicable to the Type 10 Printer:

ACTUATOR ERROR  
BAND ERROR  
DATA PARITY ERROR  
PARITY ERROR  
PAPER FEED MOTION ERROR  
FORMS JAM  
FORMS RUNAWAY  
INVALID TRANSFER  
PAPER CHECK  
POWER LOSS  
SLEW ERROR \*

STACKER FULL  
TEMPERATURE ERROR  
VFU ERROR

\* The vertical format test forces a slew error condition, so this should appear once each time the 'V' test is run.

Add the following commands to section 7.4.5.2:

DOWN, (C), (T), (S).

This places an entry into the table. Before an entry can be made the device and unit numbers must be set. The program checks the Cylinder (C), Track (T), and Sector (S) for proper range. The sector is saved but is not used by the program, the entire track is downed and not used. If the track is already downed the message 'ALREADY IN TABLE' is printed. If the table is full the message 'TABLE FULL' is printed (there is room for 255 entries). Tests 0, 1, 2, 3, 4, and BURNIN have been changed to skip over any track that is in the table. Note that the key-in commands such as WRITE,DATA READ,DATA FORMAT etc can still use the track.

UP, (C), (T), (S).

This command deletes an entry from the table thereby allowing the track to be tested. If the track was not downed then the message 'NOT IN TABLE' is printed.

CLEAR.

This will clear all entries in the table. Note that the table is initialized when the program is loaded but not when the program is restarted at location 0500.

LIST.

This command will list all the entries in the table. The form of the printout is:

DEVICE      UNIT      CYLINDER      TRACK      SECTOR

If there were no entries in the table the message 'TABLE EMPTY' is printed.

It should be noted that the BTF table is only kept in memory and will be lost when another program is loaded. It is suggested an external copy be made of the bad tracks so they may be reentered when the test is run again.

Until W 8900313B is available, replace the first part of the first paragraph of section 2.3 with the following:

When the test program is loaded and execution begins, it identifies itself and inquires if the real-time clock should be enabled during testing. If it is, the user responds with a Y)ES, otherwise, the response is N)O. The program then asks if underflow interrupt checks are to be suppressed, the responses are Y)ES or N)O. The test program then masks off interrupts.